THE JOURNAL

OF

COMPARATIVE NEUROLOGY

FOUNDED BY C. L. HERRICK, 1891

EDITORIAL BOARD

W. MAXWELL COWAN, Managing Editor
Washington University School of Medicine
Saint Louis, Missouri

JAY B. ANGEVINE, JR.
University of Arizona

THEODOR W. BLACKSTAD
University of Aarhus
Denmark

MILTON W. BRIGHTMAN
National Institutes of Health

RICHARD P. BUNGE
Washington University

MALCOLM B. CARPENTER
Columbia University

JOHN E. DOWLING
Harvard University

R. W. GUILLERY
University of Wisconsin

HARVEY J. KARTEN
State University of New York

LAWRENCE KRUGER
University of California
Los Angeles

SANFORD PALAY
Harvard Medical School

RICHARD L. SIDMAN
Harvard Medical School

JEROME SUTIN
Emory University

J. SZENTÁGOTHAI
Semmelweis University
Hungary

DAVID G. WHITLOCK
University of Colorado

VOLUME 160

MARCH — APRIL 1975

PUBLISHED BY

THE WISTAR INSTITUTE OF ANATOMY AND BIOLOGY

PHILADELPHIA, PA.

COPYRIGHT © 1975 BY
THE WISTAR INSTITUTE PRESS

All rights reserved

Contents

No. 1 MARCH 1, 1975

L. W. Swanson and W. M. Cowan. The Efferent Connections of the Suprachiasmatic Nucleus of the Hypothalamus ... 1

David H. Cohen. Involvement of the Avian Amygdalar Homologue (Archistriatum Posterior and Mediale) in Defensively Conditioned Heart Rate Change 13

Ronald W. Oppenheim. The Role of Supraspinal Input in Embryonic Motility: A Re-examination in the Chick 37

Ford F. Ebner and Marc Colonnier. Synaptic Patterns in the Visual Cortex of Turtle: An Electron Microscopic Study .. 51

Bruce G. Lindsey. Fine Structure and Distribution of Axon Terminals from the Cochlear Nucleus on Neurons in the Medial Superior Olivary Nucleus of the Cat 81

R. M. Seymour and M. Berry. Scanning and Transmission Electron Microscope Studies of Interkinetic Nuclear Migration in the Cerebral Vesicles of the Rat 105

Michael T. Shipley. The Topographical and Laminar Organization of the Presubiculum's Projection to the Ipsi- and Contralateral Entorhinal Cortex in the Guinea Pig 127

No. 2 MARCH 15, 1975

B. G. Cragg. The Development of Synapses in the Visual System of the Cat 147

E. G. Jones. Lamination and Differential Distribution of Thalamic Afferents within the Sensory-motor Cortex of the Squirrel Monkey 167

E. G. Jones. Varieties and Distribution of Non-pyramidal Cells in the Somatic Sensory Cortex of the Squirrel Monkey ... 205

No. 3 APRIL 1, 1975

URSULA C. DRÄGER. Receptive Fields of Single Cells and Topography in Mouse Visual Cortex 269

JOSEPH F. PASTERNAK AND THOMAS A. WOOLSEY. The Number, Size and Spatial Distribution of Neurons in Lamina IV of the Mouse SmI Neocortex 291

JOSEPH F. PASTERNAK AND THOMAS A. WOOLSEY. On the "Selectivity" of the Golgi-Cox Method 307

SAMUEL WARD, NICHOL THOMSON, JOHN G. WHITE AND SYDNEY BRENNER. Electron Microscopical Reconstruction of the Anterior Sensory Anatomy of the Nematode *Caenorhabditis elegans* 313

L. A. BENEVENTO AND JAMES H. FALLON. The Ascending Projections of the Superior Colliculus in the Rhesus Monkey (*Macaca mulatta*) 339

DUANE E. HAINES. Cerebellar Corticovestibular Fibers of the Posterior Lobe in a Prosimian Primate, the Lesser Bushbaby (*Galago senegalensis*) 363

P. G. M. LUITEN. The Central Projections of the Trigeminal, Facial and Anterior Lateral Line Nerves in the Carp (*Cyprinus carpio* L.) 399

No. 4 APRIL 15, 1975

DONALD A. KEEFER AND WALTER E. STUMPF. Atlas of Estrogen-concentrating Cells in the Central Nervous System of the Squirrel Monkey 419

DOLORES M. SCHROEDER AND SVEN O. E. EBBESSON. Cytoarchitecture of the Optic Tectum in the Nurse Shark 443

ENNIO PANNESE, RAOUL VENTURA AND ROSSELLA BIANCHI. Quantitative Relationships between Nerve and Satellite Cells in Spinal Ganglia: An Electron Microscopical Study. II. Reptiles 463

HUBERT KORR, BRIGITTE SCHULTZE AND WERNER MAURER. Autoradiographic Investigations of Glial Proliferation in the Brain of Adult Mice. II. Cycle Time and Mode of Proliferation of Neuroglia and Endothelial Cells 477

JAMES R. BRAWER AND D. KENT MOREST. Relations between Auditory Nerve Endings and Cell Types in the Cat's Anteroventral Cochlear Nucleus Seen with the Golgi Method and Nomarski Optics 491

GEORGE F. MARTIN, R. DOM, J. S. KING, M. ROBARDS AND C. R. R. WATSON. The Inferior Olivary Nucleus of the Opossum (*Didelphis marsupialis virginiana*), Its Organization and Connections 507

VIKTOR HAMBURGER. Cell Death in the Development of the Lateral Motor Column of the Chick Embryo 535

Index to Volume 160 547